

**REMARKS**

Applicant notes the indicated allowability of Claim 13.

Claims 1-6, 8-12, and 14-31 stand rejected as obvious over U.S. Patent No. 4,891,555 to Ahlgren et al. ("Ahlgren") in combination with U.S. Patent No. 5,525,863 to Kowalczyk et al. ("Kowalczyk").

Independent Claim 1, as amended, claims a method of making an arc tube chamber intermediate of tubular end portions comprising the step of, *inter alia*, positioning a mold with a chamber cavity "having a flattened portion at the longitudinal center thereof." Independent Claim 19, as amended, claims a method of making an arc tube chamber intermediate of tubular end portions comprising the step of, *inter alia*, positioning a mold with a chamber cavity wherein the chamber cavity is "asymmetrical at the longitudinal center thereof in at least one longitudinal cross-section." Independent Claim 18, as amended, claims a mold for forming a bulbous arc tube chamber intermediate tubular end portions in a formed body arc tube wherein the mold defines a cavity "having a flattened side at the longitudinal center thereof." Independent Claim 27, as amended, claims a mold for forming an elongated bulbous chamber intermediate tubular end portions in an arc tube wherein the mold defines a cavity "being asymmetrical at the longitudinal center thereof in at least one longitudinal cross-section."

The examiner agrees that there is no disclosure or suggestion in Ahlgren of forming a chamber having an asymmetrical shape, including the specified asymmetrical shape resulting from a flattened portion at the longitudinal center thereof. The examiner bases the rejection on the assertion that the fact that Ahlgren fails to teach an

asymmetrical shape is "immaterial since one of ordinary skill would have recognized that asymmetrical shapes could be blow molded as taught by Kowalczyk."

The examiner appears to have misinterpreted what Kowalczyk fairly discloses. Kowalczyk discloses pinching (i.e. compressing) the end portions of a cylindrical tube to form shaped end portions of a substantially cylindrical chamber. Kowalczyk discloses that the wall thickness of the compressed end portions were found to be surprisingly uniform and hypothesizes that the uniform wall thickness may be due to "blow molding" the softened glass in the pinch jaws, i.e., applying internal pressure to smooth out the softened glass that is being compressed by the pinch jaws.

Kowalczyk adds nothing to the teaching of Ahlgren. There is no teaching or suggestion whatsoever in Kowalczyk of applying internal pressure to a softened tube to expand the tube into a mold to form a bulbous chamber. Moreover, there is no teaching or suggestion in either reference that a portion of the longitudinal center of a bulbous arc tube chamber may be flattened, or that the chamber may be asymmetrical at the longitudinal center thereof in longitudinal cross-section.

Still further, Kowalczyk expressly teaches away from flattening the walls of the chamber at the longitudinal center thereof. The examiner appears to rely on the teaching in Kowalczyk of applying internal pressure to obtain uniform wall thickness as curing the deficiencies expressly recognized in Kowalczyk of flattening the chamber walls on the basis that "blow molding of the tube results in elimination of crevices ...". The examiner's position is not logical and the reliance on Kowalczyk is in error. Clearly Kowalczyk teaches that flattening the walls is a deficiency in the prior art. If the

examiner's assertion were correct, then Kowalczyk would have taught that the deficiency may be overcome by blow molding. Kowalczyk makes no such teaching. To the contrary, Kowalczyk teaches that the chamber must remain cylindrical (and symmetrical) at the longitudinal center thereof and that the axis of the electrodes may be lowered to reduce the distance between the electrode axis and the bottom of the cylindrical chamber.

It is not logical to conclude that the teaching in Kowalczyk of applying internal pressure when pinch sealing the end portions of the arc tube overcomes the express teaching away from flattening the walls found in the very same reference. Kowalczyk expressly teaches that such flattening is undesirable because it creates locations where the vaporized lamp fill may condense and pool during operation of the lamp. (column 2, lines 42-49), and expressly teaches that such deficiency may be overcome by maintaining a cylindrical chamber and lowering the electrodes. Applicant has discovered a contrary solution and it is pure hindsight to suggest that applicant's claimed inventions are obvious to the asserted combination.

There is no suggestion or motivation from either Ahlgren or Kowalczyk to combine the references as relied upon by the examiner, and in fact Kowalczyk expressly teaches away from the asserted combination.

Reconsideration and withdrawal of the rejections based on the combination of Ahlgren and Kowalczyk is solicited.

Further, the dependant claims each include additional patentable limitations. For example, Claim 31 is directed to a mold defining a cavity having a "canoe-shaped"

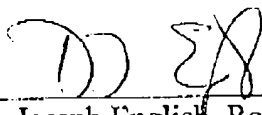
portion. There is no disclosure or suggestion in any reference of an arc tube chamber having a "canoe-shaped" portion as claimed.

Consideration and allowance of Claim 32 is solicited. No new matter has been added.

Reconsideration and withdrawal of the rejection is solicited. A further and favorable Action and allowance of all claims is solicited.

Respectfully submitted,

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